

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SITE CLEANUP REQUIREMENTS ORDER NUMBER 93-018

AMENDMENT OF SITE CLEANUP ORDERS NOS. 91-020 AND 92-132

FMC CORPORATION, GROUND SYSTEMS DIVISION AND
FEDERAL PACIFIC ELECTRIC COMPANY

333 WEST BROKAW ROAD
SANTA CLARA
SANTA CLARA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter called the Board) finds that:

Site Description and Site History

1. FMC Corporation (FMC) presently owns and occupies a 27 acre property at 333 West Brokaw Road, Santa Clara, Santa Clara County hereinafter referred to as the Site, as shown in attached Figures 1, 2 and 4.
2. A part of the property was first developed in 1950 by Pacific Electric Manufacturing Company, which was acquired by Federal Electric Products Company in 1953, and in turn, was acquired by Federal Pacific Electric Company (FPE) in 1954. FPE owned and operated the property from 1954 to 1964 when it sold the property to FMC (Figure 3). FPE leased a portion of the facility and the property from FMC until 1968, after which FMC assumed control of the entire parcel.

Regulatory Status

3. On February 20, 1991, the Board adopted Site Cleanup Requirements (SCR) Order No. 91-020, which required FMC as the sole discharger to perform site characterizations, and propose and implement appropriate remedial actions.

4. On October 21, 1992, the Board adopted SCR Order No. 92-132, which amended the previous Order. This amended Order added cleanup standards, concurred with FMC's proposed remedial actions for soil and groundwater and adopted findings that added FPE as a discharger making both FPE and FMC jointly and severally liable for pollutant conditions onsite. Provision A.1. allowed a discharger to propose alternate cleanup levels if it is found that cleanup levels specified in SCR Order No. 92-132 cannot be achieved through reasonable attempts. FPE has stated in the Regional Board record and in their November 19, 1992 appeal to the State Board that the cleanup levels proposed by FMC are economically burdensome and that FPE wishes to propose alternate cleanup levels. At this time, FPE has not submitted a technical report substantiating the existing cleanup levels are unreasonable nor has FPE proposed alternative levels. The Board accepted FMC's proposals, which were adopted in SCR Order No. 92-132, but is willing to review alternative cleanup levels proposed by the dischargers. The Board may concur with one or more alternative which achieves compliance within a reasonable time frame with applicable Water Quality Control Plans and Policies.
5. FPE, pursuant to Section 13321 of the California Water Code, filed a petition with the State Water Resources Control Board requesting: a review of the Amended Order; for stay of action; and, a request for an evidentiary hearing. FPE appealed the Board's Order 92-132, which is summarized in the following points:
 - a. That the Regional Board did not have substantial evidence to name FPE as a discharger, and;
 - b. That the appropriate cleanup levels in soils for VOC, total petroleum hydrocarbon and PCB pollution can be higher and should be reevaluated.
6. This Order amends SCR Order No. 92-132 by reconsidering and addressing some of the items FPE appealed.

Determination of FPE's Responsibilities as a Discharger

7. FPE submitted a site use and chemical use history which revealed FPE's product line to consist of electrical transformers, circuit breakers and air switches and the inventories, use descriptions, storage and use areas of various chemicals. Regional Board staff utilized this information for recommending the naming of FPE as a discharger. In addition, State Board Resolution No. 92-49, which refers to the procedures and evidence of discharge supports the Board in naming FPE as a discharger.

8. Information in FPE's site use history and supplemental additions to the record by FPE (October 21, 1992) indicates that several areas of pollution at the site, Areas I and VII-a, are wholly or partially outside of the boundaries of operation by FPE (Figures 3 and 5). Area I was in lands formerly owned by parties other than FPE or FMC and was purchased by FMC in 1979. Based on the evidence in FPE's site use history, staff have determined that FPE is not responsible for soil pollution found in Area I. Additionally, the northwest portion of soil pollution Area VII-a was outside of FPE's original property boundary and staff have determined that FPE is not responsible for soil pollution found in the northwest portion of Area VII-a.
9. Area VI was outside of but adjacent to FPE's original area of operations. Based upon aerial photographs in FPE's site use history, the portion of the property where pollution Area VI is located was used by FPE for automobile parking. Portions of surface pollution Area VII-a was used by FPE for materials storage ("northwest storage yard") and later for automobile parking. The aerial photographs in FPE's site use history show that both Areas VI and VII-a appear to have been paved since at least 1964.
10. The balance of surface pollution areas are within the property owned in common by both dischargers. Area IV has limited petroleum hydrocarbon pollution beneath a parking area which was in front of FPE's office and building entrance. Photographs in FPE's site use history indicate this area has been paved since at least 1954. Areas II, III, V, and VII-b surround the main building (Plant 22) and contain soil pollution by different VOCs and petroleum hydrocarbons and PCBs in Area II and III. (Figure 5).
11. FPE's Site Use History (September 1991) shows that FPE used various chemicals in their manufacturing operations, three which are now found onsite are transformer oil, PCBs and TCA. FMC's Site Use History (November 1990) has shown their chemical use to include VOCs (TCE, TCA, methyl ethyl ketone methylene chloride), nonchlorinated solvents, paints, fuels, oil and waste oil storage.
12. Based on FPE's site use history and Findings 10 and 11, the Board finds that FPE is named as a discharger for PCBs, petroleum hydrocarbons as transformer oil and TCA in Areas II, III, V, and VII-b.
13. With respect to the remaining areas of soil pollution, Areas IV and VI and portions of VII-a, a clear division of responsibility for surface pollution is not possible and therefore, based upon substantial evidence in the record, the Board finds that both FPE and FMC are named as dischargers.

14. Operations conducted onsite by both parties during their respective ownership and occupancy of the Site have polluted soil at the site and the surface pollution may have impacted groundwater. Groundwater in Operable Unit (OU) OU-2 is an area of groundwater pollution that is wholly, or in part, related to the surface pollution from activities by either FMC and FPE. A clear division of the responsibility for the pollution found in OU-2 is not possible at this time and therefore, based upon substantial evidence in the record, the Board finds both FMC and FPE are named as dischargers for the pollution in groundwater OU-2 (Figure 6).
15. It has been shown in FPE's site use history and FMC's remedial investigation report (April 1991) that there is no definite pollutant source area for the VOC groundwater pollution found in OU-3. VOCs have been detected at extremely low concentrations four hundred feet southeasterly of OU-3 and petroleum hydrocarbon surface pollution is found throughout Area VII-a. The VOCs and petroleum hydrocarbons detected at the surface are not required to be remediated. Conditions of groundwater pollution in OU-3 are shown to not require remediation but it is necessary to perform periodic monitoring. A clear division of the responsibility for the pollution found in OU-3 is not possible at this time and therefore, the Board finds both FMC and FPE are named as dischargers for the pollution in groundwater OU-3 (Figure 6).
16. Groundwater pollution by VOCs in OU-1 is confirmed to be from an offsite source from an adjacent FMC property under a separate Board Order in which FMC is named as the sole discharger.
17. This action is an order to enforce the laws and regulations administered by the Board. This action is categorically exempt from the provisions of the CEQA pursuant to Section 15321 of the Resources Agency Regulations.
18. The Board has notified the dischargers and interested agencies and persons of its intent under California Water Code Section 13304 to prescribe Site Cleanup Requirements for the dischargers and has provided them with the opportunity for a public hearing and an opportunity to submit their written views and recommendations.
19. The Board in a public meeting heard and considered all comments pertaining to these requirements.

IT IS HEREBY ORDERED, pursuant to Section 13304 of the California Water Code, that the dischargers, successors and assignees shall cleanup and abate the effects described in SCR Order No. 91-020 and SCR Order No. 92-132 and the above findings of this Order Amendment as follows:

A. Provisions

1. The dischargers shall comply with all requirements of SCR Order Nos. 91-020, 92-132 except as amended by provisions of this Order.
2. The following is added to Provision 2 of SCR Order No. 92-132. The dischargers shall comply with the requirements above, in accordance with the following time schedule and task:

TASKS AND COMPLETION DATES

c. TASK: SUPPLEMENTAL EVALUATION OF REMEDIAL ALTERNATIVES

The dischargers may submit a technical report acceptable to the Executive Officer to evaluate the need for alternative cleanup levels and actions and, if appropriate, propose alternative remedial actions and final cleanup levels for onsite pollution. This report shall include but not limited to the following:

- 1) A summary of any additional investigation activities taken to define the extent of onsite soil pollution;
- 2) A supplemental evaluation of recommended final cleanup levels for onsite soil pollution based on risk assessments and the fate and mobility of the pollutants evaluated;
- 3) A supplemental feasibility study evaluating final remedial measures;
- 4) The recommended measures necessary to achieve final cleanup objectives; and,
- 5) The tasks and the time schedule necessary to implement the recommended final remedial measures.

The proposed cleanup levels shall consider guidelines established in State Water Resources Control Board Resolution No. 92-49 and shall be protective of human health and the environment and protect the potential and beneficial uses of waters of the state.

COMPLETION DATE: No later than April 17, 1993

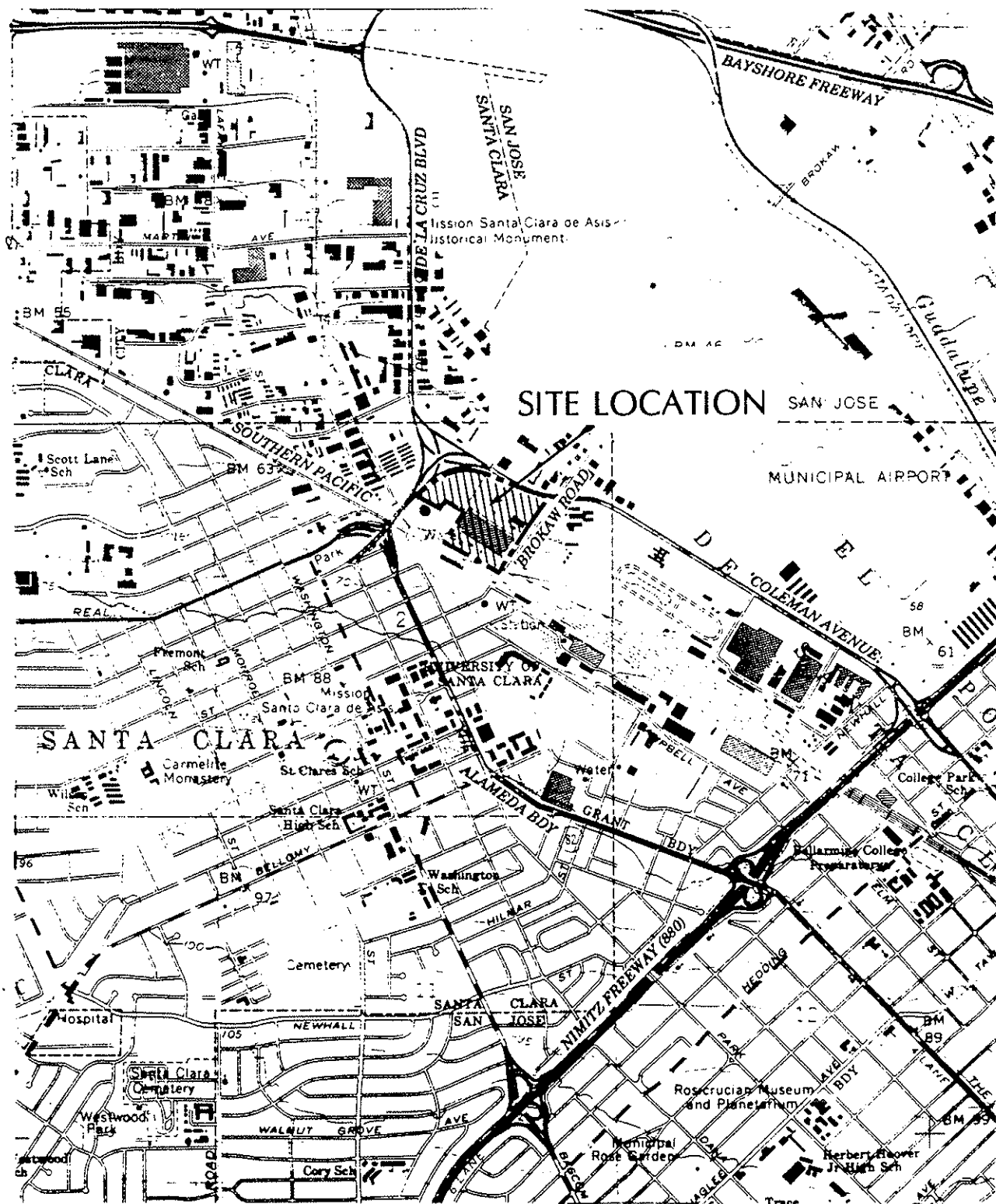
3. Pursuant to Section 13304 of the Water Code, the discharger is hereby notified that the Regional Board is entitled to, and may seek reimbursement for, all reasonable costs actually incurred by the Regional Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action, required by this Order. Upon receipt of a billing statement for such costs, the discharger shall reimburse the Regional Board.
4. The Board will review this Order periodically and may revise the requirements as necessary.

I, Steven R. Ritchie, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on February 17, 1993.

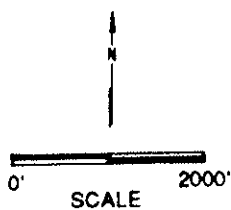


Steven R. Ritchie
Executive Officer

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| Figure 1 | Regional Map |
| Figure 2 | Site Map |
| Figure 3 | Parcel Map of FPE Property |
| Figure 4 | FMC Properties after 1968 |
| Figure 5 | Soil Pollution Areas |
| Figure 6 | Groundwater OUs |

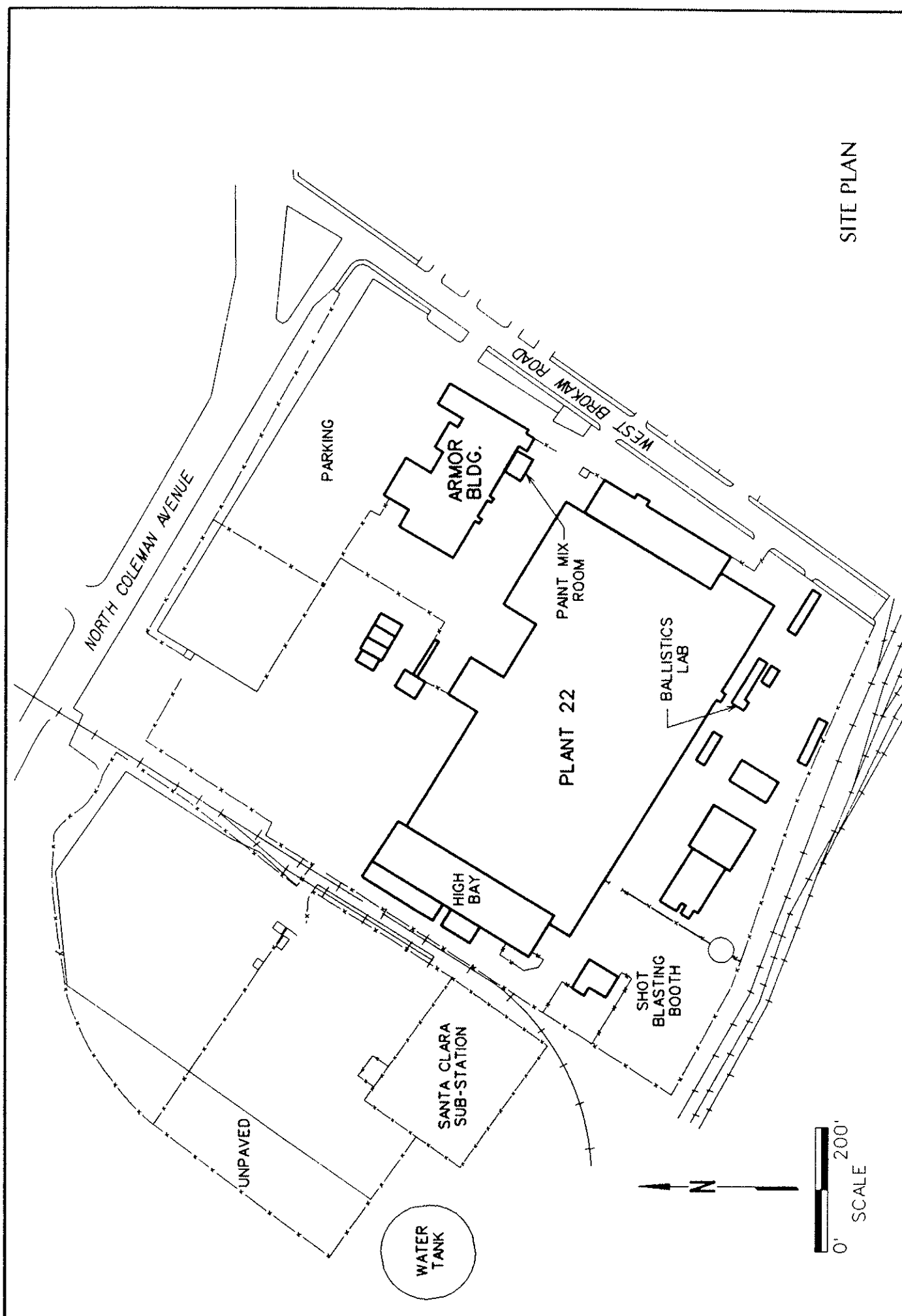


TAKEN FROM USGS 7.5' SAN JOSE WEST QUADRANGLE, 1980



SITE LOCATION

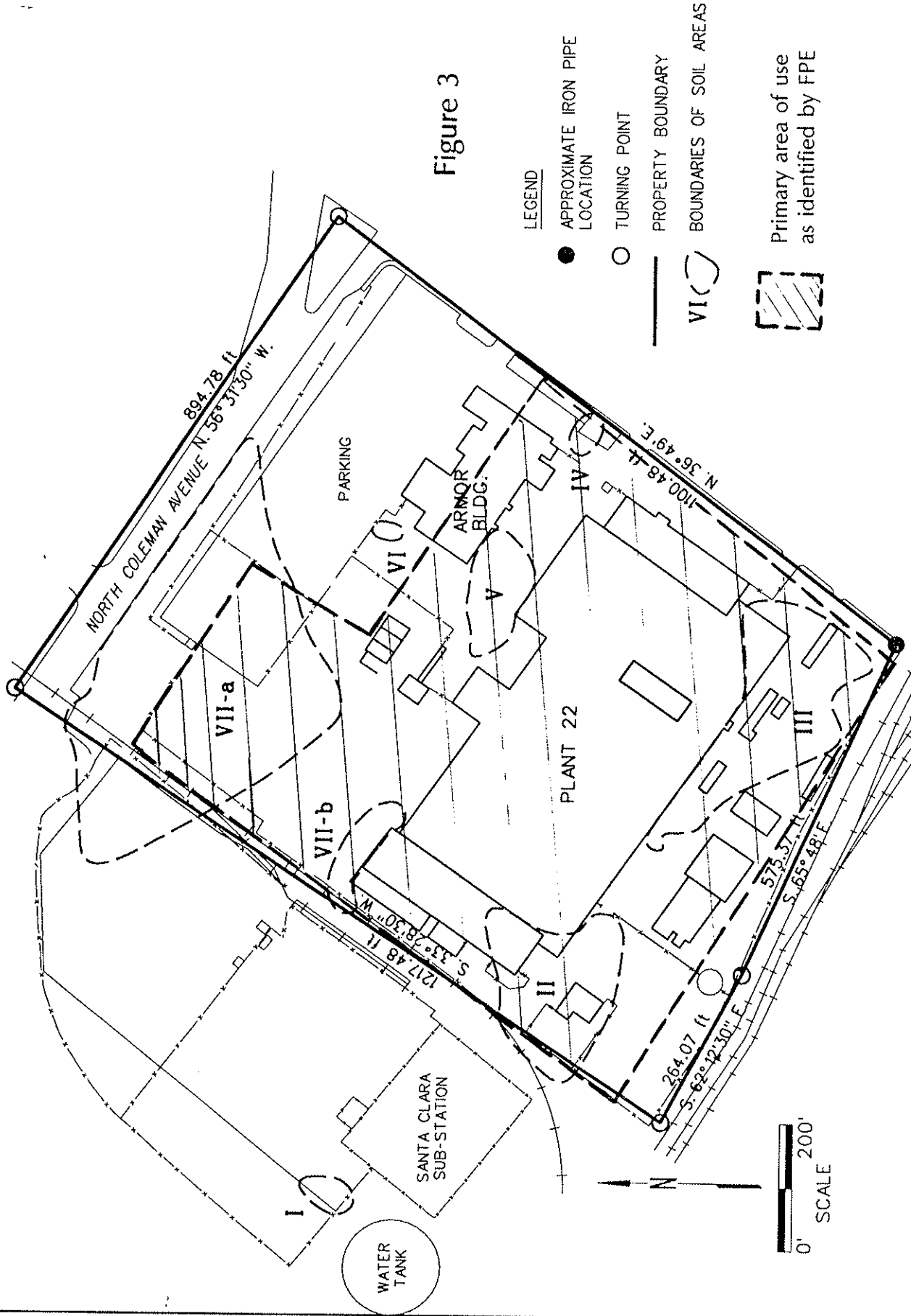
Figure 1

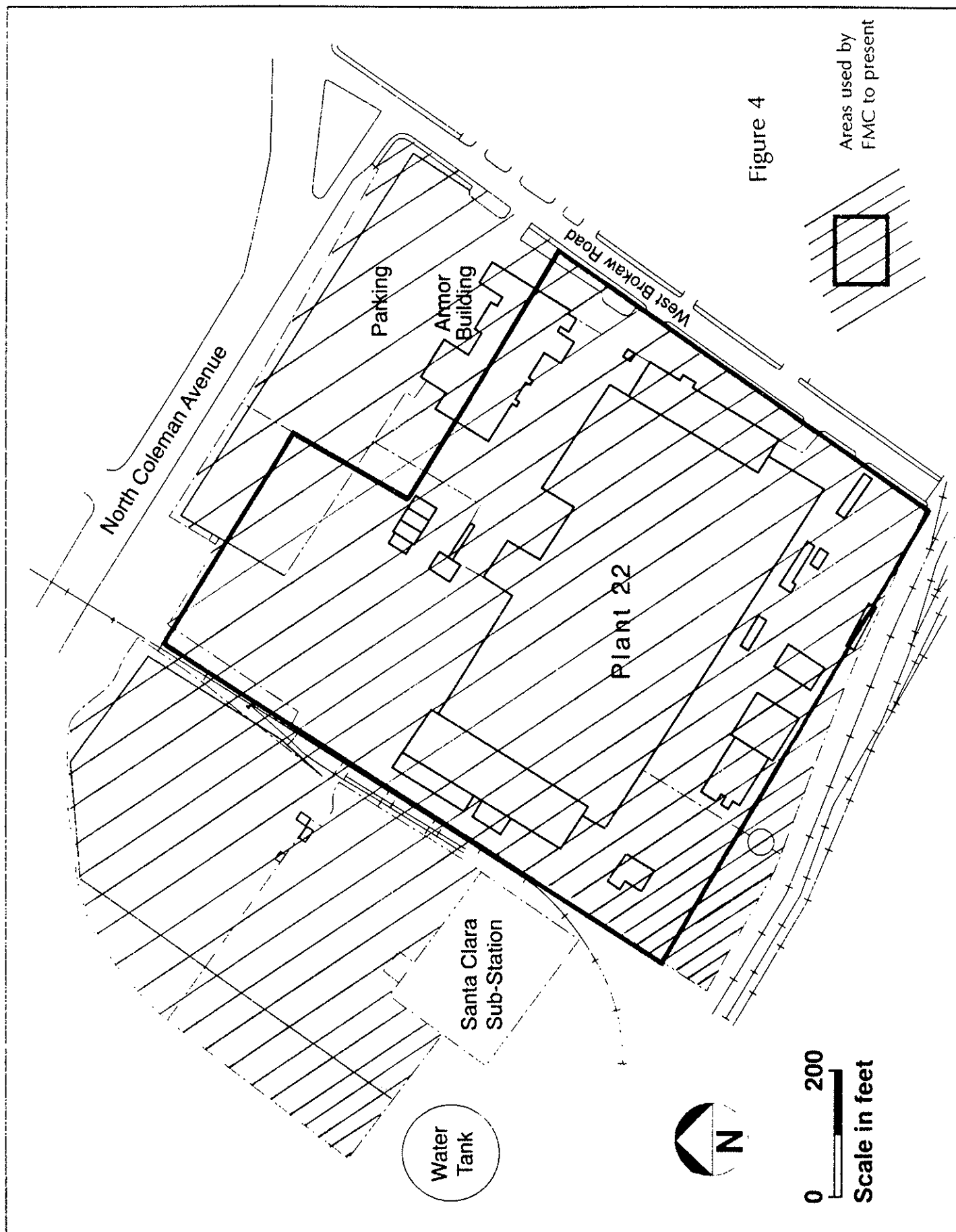


SITE PLAN

Figure 2

Figure 3





LEGEND

- W-27A & 35.59 GROUNDWATER MONITORING WELL WITH POTENTIOMETRIC SURFACE ELEVATION
- W-201A * 35.00 OFF-SITE GROUNDWATER MONITORING WELL
- 36.0' — GROUNDWATER SURFACE CONTOUR (FT, MSL)

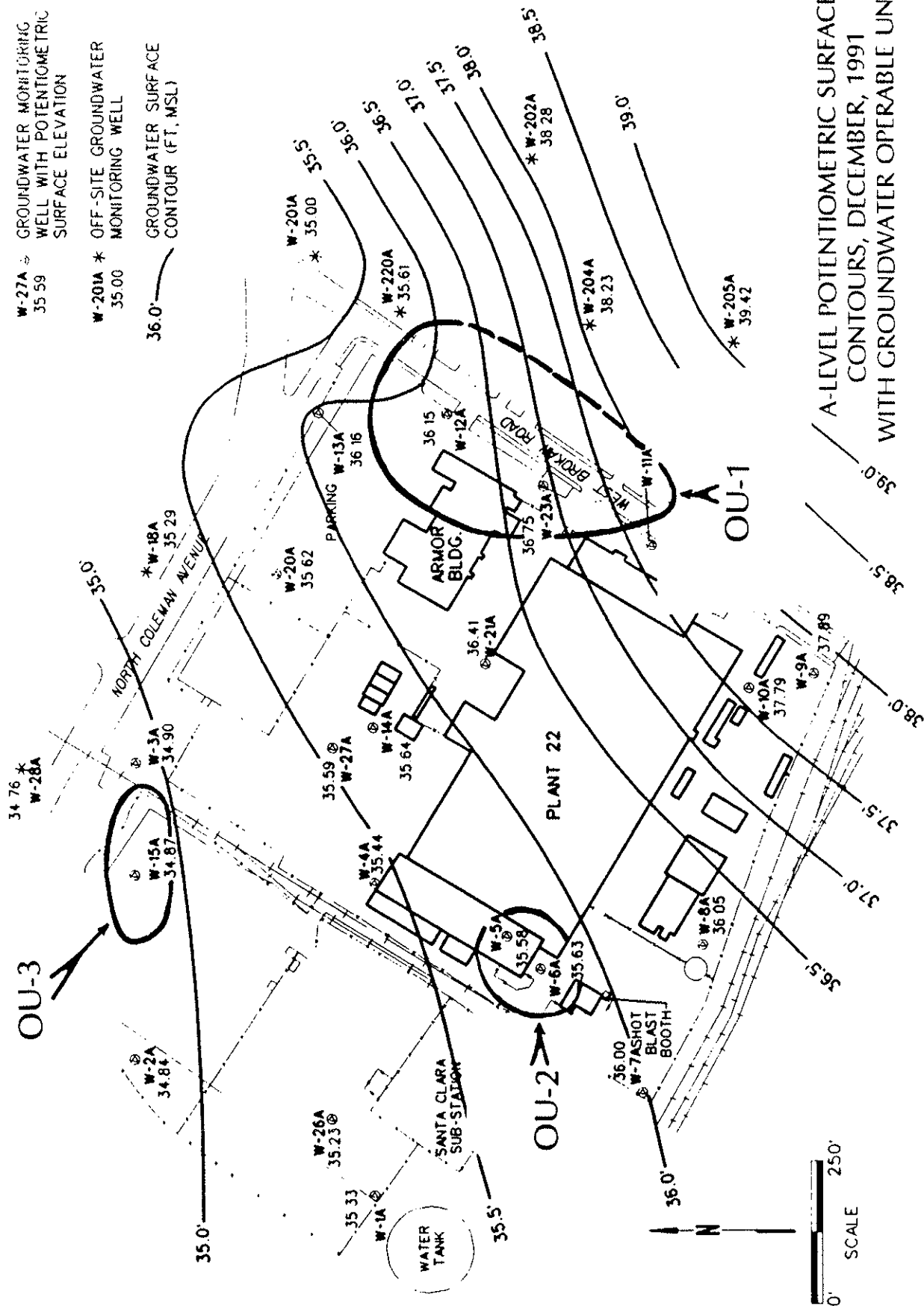


Figure 6